State Information Technology Advisory Committee Meeting

September 27, 2005

Pioneer Room, State Capitol

Introduction & Various Topics

Curt Wolfe
Information Technology Department

Standards for Approval

Cathie Forsch
Tax Department

Standards for Approval

- **Public Online Services User Authentication** -- New (AS002-03)
  - This standard will provide the public with a single user login id for all new applications.
- **Access Control Standard - Revision** (ST006-05.4)
  - The first change in this version removed the Userid format from the standard and made it a guideline, this also removed the exemption for law enforcement agents and renumbered accordingly.
  - The second change requires that the user portion of an employee's email address match their userid. The final change requires that "enterprise wide" email addresses begin with "ND".
- **Application Development Tools and Languages – Revision** (AS001-03)
  - The only change was to add the Mercury Interactive Load Runner to the Tools/Language list.

Mainframe Migration Update

Jeff Carr
Information Technology Department

Mainframe Migration: What is it?

- Migration means moving, or porting, applications from the mainframe to a different platform.
- This does not mean applications are re-written: functionality will not change.
- End user experience will not change: this is the overarching design goal.

Why migrate from the mainframe?

- The world is moving to Intel compatible servers: Windows and Linux.
- At present, ITD's technical skill set is divided between the mainframe world and the Intel world.
- Software licensing and hardware maintenance are much less expensive in the Intel World.
- Preliminary analysis indicates that these operational costs will be reduced by several million dollars per year.

Analysis: can we migrate?

- Each and every application needs to be examined to determine if it can be migrated.
- This analysis will:
  - identify any specific technical hurdles that would have to be overcome,
  - Identify all integration points between applications, and
  - provide an ROI for this project.

Technical Evaluation

- Software AG and ITD have been examining each and every application.
- There are no technical show stoppers.
- This analysis has indicated that the effort to migrate will be somewhat larger than original estimates, while the annual savings will be larger as well.
- Orchestration is our biggest challenge

Orchestration

- We cannot migrate all applications at one time.
- A phased approach must be used: subsets of applications will be migrated in groups.
- This reduces the support burden: only subsets of users will be undergoing change at any one time.
- This lessens the testing burden: subsets of applications will be tested at any one time.
- Managing these migration groups will be our biggest challenge.

Not every application will migrate.

- Some systems are in the process of being replaced: The Tax System, Legislative Council's LAWS, and BND's systems will not be migrated.
- Integration between these systems and the migrated applications is a crucial component of orchestration challenge.
- This may require that ITD provide mainframe services after the migration is complete.
- Note that maintaining a mainframe environment would adversely affect ROI.

Testing, Testing, 1-2-3

- Testing the applications so that business processes continue smoothly is crucial.
- Some of the testing can be done without significant agency resources – batch streams.
- Much of the testing will require agency resources – business experts are required to define test plans and use cases for the online portions of applications.
- Automated testing tools are crucial in reducing this agency burden.

Testing, Testing 1-2-3

- The importance of testing cannot be overstated.
- The success of this testing effort depends upon agency commitment.
- Why should agencies commit these resources: an ongoing reduction of several million dollars per year in operating costs (software licensing and hardware maintenance).

Summing up.

- Mainframe migration presents no major technical hurdles.
- Orchestration, or which groups of applications migrate when, is the biggest challenge.
- Testing is paramount and cannot succeed without agency commitment.
- An ROI analysis from Software AG will be completed in the next week.

Recent Virus Infection and Implications

Jeff Carr
Information Technology Department

Plug&Play Viruses

- A number of different viruses infected state computers in late August.
- The virus exploited a vulnerability in the plug and play system of Windows 2000.
- These viruses were first seen in the wild 3 days after Microsoft's announcement of the vulnerability. A patch was available at the time of the announcement.
- This short time lag challenged the state's ability to respond: there was a very limited period of time available to install the patch.

Virus Impact

- Some versions of the virus locked Active Directory accounts, preventing user login.
- These viruses installed other software on the infected machines, including spyware and other viruses.
- While we have no evidence to indicate that any data was stolen, or modified, it is certainly conceivable that these viruses could have done so if the creators had so desired.
- Clean up required the machine to be rebuilt.

Implications

- We have an ever narrowing time window in which to install Microsoft security patches.
- This decreasing time window makes it imperative that state IT staff installs these patches promptly.
- ITD hosts an update server for these security patches which is available for agencies to use.
- This is not without risk: a security patch could conceivably break an application, though Microsoft works very hard to avoid that.
- These were the first viruses encountered by the state that installed other software.

Vendor Pool Contract

Pat Forster
Information Technology Department

Vendor Pool Contract

IT Contract Pool Categories
Mainframe Programmer/Analyst
Client-Server Programmer/Analyst
Microsoft Access Programmer/Analyst
J2EE Programmer/Analyst
Microsoft .Net Programmer/Analyst
PeopleSoft Programmer/Analyst
Web Designer
Project Manager
IT Business Analyst
PeopleSoft Analyst/Integration Specialist
Desktop Support Specialist

Vendor Pool Contract

- **Agencies will use a structured work order process to obtain project offers from vendors.**
- **Vendors are responsible to provide status reports to the contracting agency and participate in project status meetings.**
- **Agencies will be responsible for vendor oversight and review/acceptance of work products.**
- **Agencies will complete customer satisfaction surveys rating satisfaction with quality of work, cost and schedule adherence, and contract compliance. Unsatisfactory ratings may result in termination of a vendor's contract.**

Vendor Pool Contract

- **The contract does not preclude agencies from issuing separate procurement solicitations such as RFPs for IT professional services.**
- **Agencies may obtain IT professional services directly from ITD. ITD may also use the contract to supplement its resources.**
- **ITD hourly rates for related services:**
  - **Application Developer $54**
  - **Senior Application Developer $58**
  - **Project Manager $58**
  - **IT Business Analyst $58**
  - **Desktop Support Specialist $54**

Vendor Pool Proposals

- **26 proposals received**
- **4 disqualified (2 Late, 2 Invalid Cost Proposals)**

- **22 proposals accepted:**
  - **12 ND companies**
  - **10 out of state companies**

- **Evaluation criteria**
  - **30% general vendor business qualifications**
  - **30% vendor staff qualifications**
  - **40% cost**

Vendor Pool Proposals

		Applications Developer - Programmer/Analyst					
Vendor Name	State	Main Frame	Client Server	MS Access	J2EE	.Net	People Soft
Applied Engineering, Inc	ND			√		√	√
BPro, Inc	SD			√		√	
Ciber	WA	√	√	√	√	√	√
Compuware Corporation	MN	√		√	√	√	
Eide Bailly LLP	ND	√	√	√	√	√	√
Enterprise Solutions, Inc.	ND	√	√		√	√	
Everest Consultants, Inc	OR		√		√	√	√
Internet Design & Consulting	ND		√	√		√	
Intertech	MN		√		√	√	
Maximus	CA						√
Moten Tate	FL	√	√	√	√	√	√
Nexus Innovations	ND		√			√	
Objects WorldWide	VA		√		√	√	
Scientific Technologies	AZ				√		
StrataCom	ND		√	√	√	√	
Strategic Business Engineering	ND			√			
Tier Technologies	NM	√	√		√	√	
Vision Technology	ND		√	√		√	

VendorName	Web Design	Project Manager	Business Analyst	P.Soft Integrator	Desktop Support
Applied Engineering, Inc	√	√	√		√
BPro, Inc	√				
CIBER	√	√	√	√	√
Compuware Corporation	√	√	√		
Eide Bailly LLP	√	√	√		√
Enterprise Solutions, Inc.		√	√		√
Everest Consultants, Inc	√	√	√	√	
HURTDIDIT	√				
iNet Technologies	√				
Internet Design & Consulting	√				√
Intertech	√	√	√		
Maximus		√		√	
Moten Tate	√	√	√	√	√
NDACo					√
Network Center	√				√
Nexus Innovations		√	√		
Scientific Technologies		√	√		
StrataCom	√		√		
Strategic Business Engineering		√			
Tier Technologies	√	√	√		
Vision Technology	√				

Mainframe Developer Awards

- Ciber
- Compuware
- Enterprise Solutions
- Moten Tate
- Tier

	Low	Average	High
Onsite Rates	$68	$87	$100
Offsite Rates	$56	$71	$93

Client-Server Developer Awards

- Ciber
- Everest
- Internet Design & Consulting
- Intertech
- Moten Tate
- Nexus
- Objects Worldwide
- Stratacom
- Tier
- Vision Technology

	Low	Average	High
Onsite Rates	$50	$93	$150
Offsite Rates	$50	$76	$115

MS Access Developer Awards

- **Applied Engineering**
- **Bpro**
- **Ciber**
- **Compuware**
- **Eide Bailly**
- **Internet Design & Consulting**
- **Moten Tate**
- **Stratacom**
- **Strategic Business Engineering**
- **Vision Technology**

	Low	Average	High
Onsite Rates	$57	$78	$105
Offsite Rates	$38	$67	$95

J2EE Developer Awards

- Ciber
- Compuware
- Enterprise Solutions
- Everest
- Intertech
- Moten Tate
- Objects Worldwide
- Scientific Technologies
- Stratacom
- Tier

	Low	Average	High
Onsite Rates	$44	$101	$150
Offsite Rates	$46	$82	$115

.Net Developer Awards

- Applied Engineering
- Bpro
- Ciber
- Compuware
- Everest
- Internet Design & Consulting
- Moten Tate
- Nexus
- Objects Worldwide
- Vision Technology

	Low	Average	High
Onsite Rates	$44	$82	$112
Offsite Rates	$46	$71	$102

PeopleSoft Developer Awards

- **Applied Engineering**
- **Ciber**
- **Everest**
- **Maximus**
- **Moten Tate**

	Low	Average	High
Onsite Rates	**$61**	**$119**	**$188**
Offsite Rates	**$61**	**$102**	**$158**

PeopleSoft Integrator Awards

- **Ciber**
- **Everest**
- **Maximus**
- **Moten Tate**

	Low	Average	High
Onsite Rates	$80	$124	$188
Offsite Rates	$75	$105	$158

Web Designer Awards

- **Applied Engineering**
- **Bpro**
- **Ciber**
- **Compuware**
- **Eide Bailly**
- **Hurtdidit**
- **iNet**
- **Internet Design & Consulting**
- **Moten Tate**
- **Tier**

	Low	Average	High
Onsite Rates	$62	$75	$90
Offsite Rates	$40	$60	$90

Project Manager Awards

- **Applied Engineering**
- **Ciber**
- **Compuware**
- **Eide Bailly**
- **Enterprise Solutions**
- **Everest**
- **Maximus**
- **Nexus**
- **Strategic Business Engineering**
- **Tier**

	Low	Average	High
Onsite Rates	**$75**	**$118**	**$193**
Offsite Rates	**$64**	**$102**	**$163**

IT Business Analyst Awards

- Applied Engineering
- Ciber
- Compuware
- Eide Bailly
- Enterprise Solutions
- Everest
- Nexus
- Scientific Technologies
- Stratacom
- Tier

	Low	Average	High
Onsite Rates	$80	$103	$135
Offsite Rates	$60	$85	$125

Desktop Support Awards

- **Ciber**
- **Eide Bailly**
- **NDACo**

	Low	Average	High
Onsite Rates	**$51**	**$56**	**$60**
Offsite Rates	**$32**	**$47**	**$58**

Vendor Pool Contract

- **Thank you to agencies that volunteered staff and to the people who assisted with RFP requirements and served on evaluation teams!**
  - **Bank of North Dakota**
  - **Department of Human Services**
  - **Department of Transportation**
  - **Information Technology Department**
  - **Job Service North Dakota**
  - **Office of Attorney General**
  - **Office of Management and Budget**
  - **Workforce Safety and Insurance**

- **Contract Start – November 1, 2005**
- **Information sessions for agencies will be held in mid-November**

Vendor Pool Contract

Thank you!

Questions?

Tax System Replacement (TREND)

Cathie Forsch
Tax Department

Medicaid (MMIS) System Replacement

Jenny Witham
Department of Human Services

Medicaid Systems Project

- System Components
- Current Schedule
- Governance Structure

Medicaid Systems Project

System components to be procured:

1. Medicaid Management Information System (MMIS)
2. Pharmacy Point of Sale (POS)
3. Decision Support System (DSS)

Vendors can bid on one component or all 3 components

4. Independent Verification & Validation

   4 components

   - Program Office, Verification, Validation, Audit

   Vendors can bid on one component or all 4 components

Medicaid Systems Project

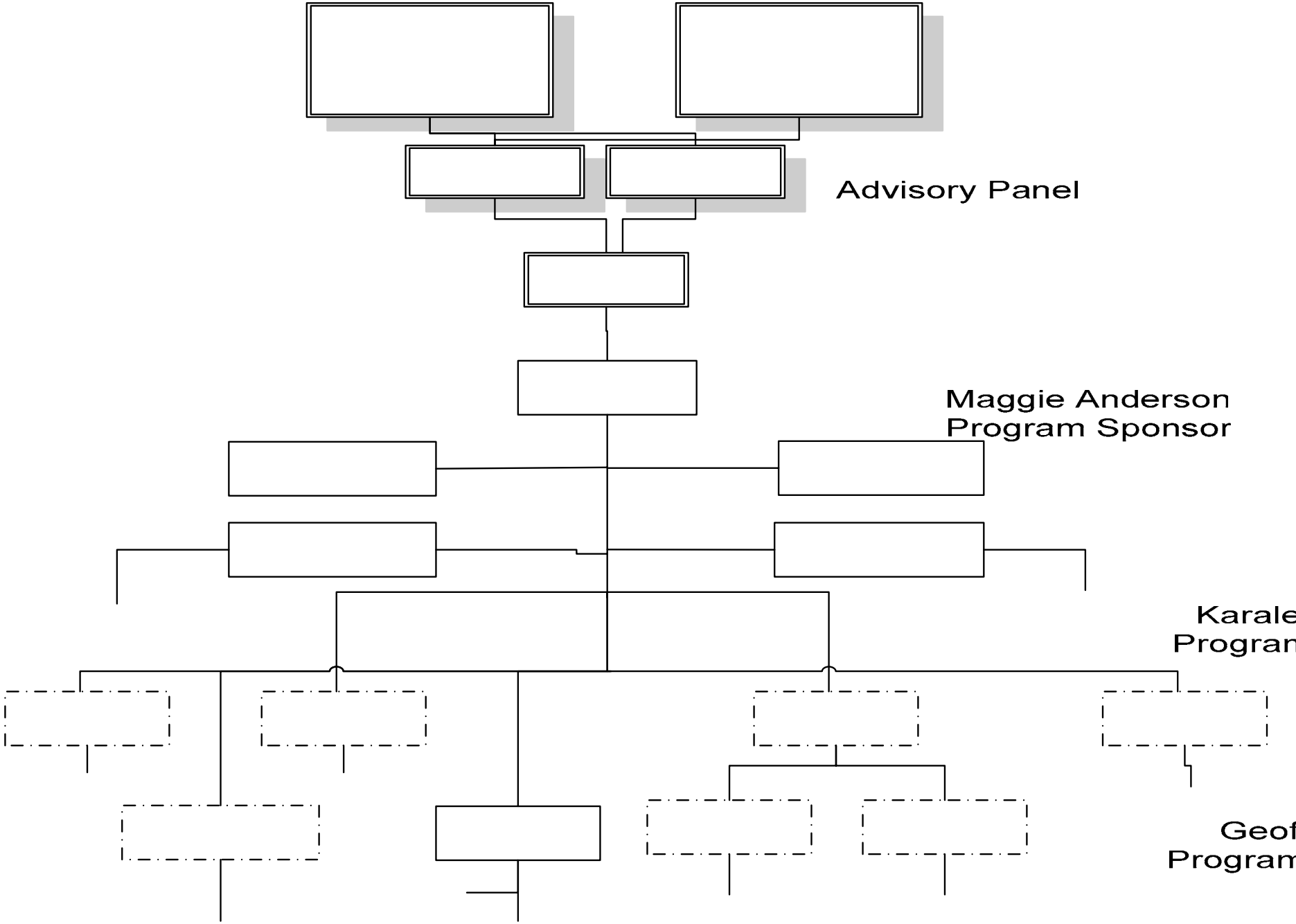
MMIS, POS, DSS

- RFP Released – June 1, 2005
- Proposals received – September 1, 2005
- Oral Presentations – early November
- Best & Final Offers – November 28, 2005
- Vendor selection – early December 2005
- Contract Negotiations – December 2005
- Scheduled start date – January 2006

Medicaid Systems Project

Independent Verification & Validation (IV&V)

- RFP released – June 29, 2005
- Proposals received – August 11, 2005
- Oral presentations – August 29 & 30, 2005
- Best & Final Offers completed September 14, 2005
- Next Steps
  - Identify winning vendor; contract negotiations; CMS Approval


Advisory Panel
Maggie Anderson
Program Sponsor
Karale
Progran
Geof
Program

Claims Management System Project

Jim Long
Workforce Safety & Insurance

Workforce Safety & Insurance IT Initiative

- Role at WSI
- Purpose of this Presentation

Workforce Safety & Insurance IT Initiative

Answers to Obvious Questions

- *Why didn't WSI include the IT Transformation request to the Legislators during last session?*
  - Sandy Blunt's Start Date
  - Jim Long's Start Date
  - Independent 3rd Party Evaluation
- *Can this IT initiative wait until next session?*
  - Outcomes Articulated by WSI's Board
  - Expectations of Stakeholders
- *What is really wrong with WSI's claims management system?*
  - Built without architectural understanding (cut, paste, link)
  - Lifecycle (parts of CMS are 13 years old)
  - WSI's customers are asking for remote access to information.

Timeline

- ***May 2004:*** Sandy Blunt starts as Executive Director and CEO
- ***June 2004:*** Organizational meeting on IT data integrity
- ***August 2004:*** Coordination of IT data integrity projects, no enhancements just clean up
- ***January 2005:*** Jim Long starts as Chief of Support Services, which oversees IT department
- ***March 2005:*** Further coordination of IT data integrity projects
- ***April 2005:*** WSI hires Gartner Group to evaluate IT system
- ***July 2005:*** Gartner Group presents recommendation
- ***August 2005:*** WSI Board of Directors approves IT recommendation

Workforce Safety & Insurance IT Initiative

Generalized Findings from the Gartner Group

- CMS does not provide a number of the features and functions provided by most current insurance claims processing solutions.
- CMS will require a number of significant enhancements, and system acquisition and integration efforts, in order to address the strategic outcomes defined by ND-WSI.
- The enhancements will be complex and costly due to the current application architecture and technology platform. ND-WSI should initiate the CMS replacement as soon as possible. The replacement project will take at least three years to complete under the best of conditions. The cost to run and maintain, CMS, and the technology risks inherent in the current platform will continue to increase and may eventually become unmanageable.
- ND-WSI should be prepared to invest anywhere in the range of $5 million to $10 million in the overall IT transformation (including claims processing but extending beyond that). ND-WSI should develop and obtain executive approval and funding for a project of this magnitude.
- WSI must implement an effective IT Change Management in order to effectively prioritize and triage technical issues.

WSI IT Action Plan

1. In order to implement effective IT Change Management, WSI has drafted an RFP to provide the training necessary. This RFP is currently being reviewed and should be submitted to ITD within the next few weeks.
2. In accordance with feedback received from ITD, WSI is currently drafting an RFP to hire a vendor that will perform a thorough analysis of WSI's IT needs. This analysis will determine the scope, budget, and cost-benefit analysis related to the replacement of WSI's claims management system.

Project Description

1. Phase One – “Where are we today and how do we get to where we want to be?”
   - Comprehensive Analysis Phase
     - Develop IT Business Plan
     - Develop IT Project Charter (scope, timeline, financial analysis, ROI, etc…)
     - Help develop RFPs as necessary (Claims COTS, Project Management, etc…)
     - Provide Independent Verification & Validation Services for claims solution (pending approval for funding)

Risks

1. Inaction
   - Not serving our customers in the most effective way possible
   - Continued degradation of CMS
   - Not meeting expectations of WSI's Board of Directors
2. Insufficient Analysis
   - Project Out of Scope
   - Project Over Budget
   - Inattention to Oversight

Network Re-bid Progress

Jerry Fossum
Information Technology Department

STAGEnet 2006

- Transport Responders
  - Backbone & Access
    - Dakota Carrier Network
      - Sole Source procedure was followed. Negotiations with DCN are currently under way.
  - Internet
    - Dakota Carrier Network
    - Qwest
    - Sprint
  - Sprint Has Been Awarded the Internet portion of the RFP.
  - Qwest has protested the award of the ‘internet portion of the RFP.

STAGEnet 2006

- Equipment Responders
  - AVI Systems
  - CDW
  - Corporate Technologies
  - Enventis Telecomm
  - Graybar
  - High Point Networks
  - Network Center
  - Qwest
  - Wire One Communications

  Corporate Technologies, AVI Systems & Qwest have been awarded the equipment contracts.

STAGEnet 2006

- Wireless RFP Released Aug. 19th
- Responses are due back Oct. 21st
- Evaluations will be the week of Oct. 24th

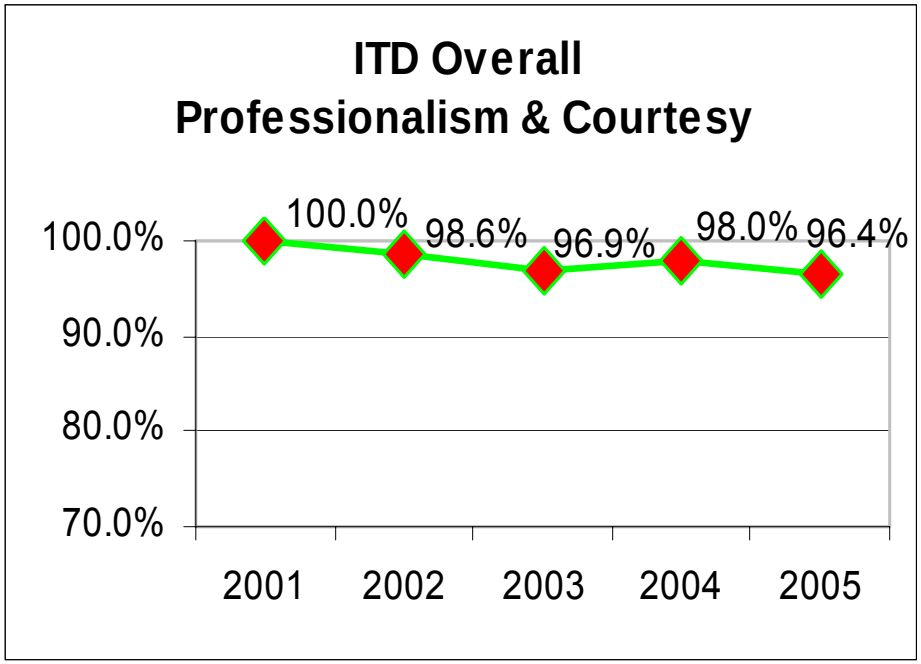
ConnectND Project Priorities

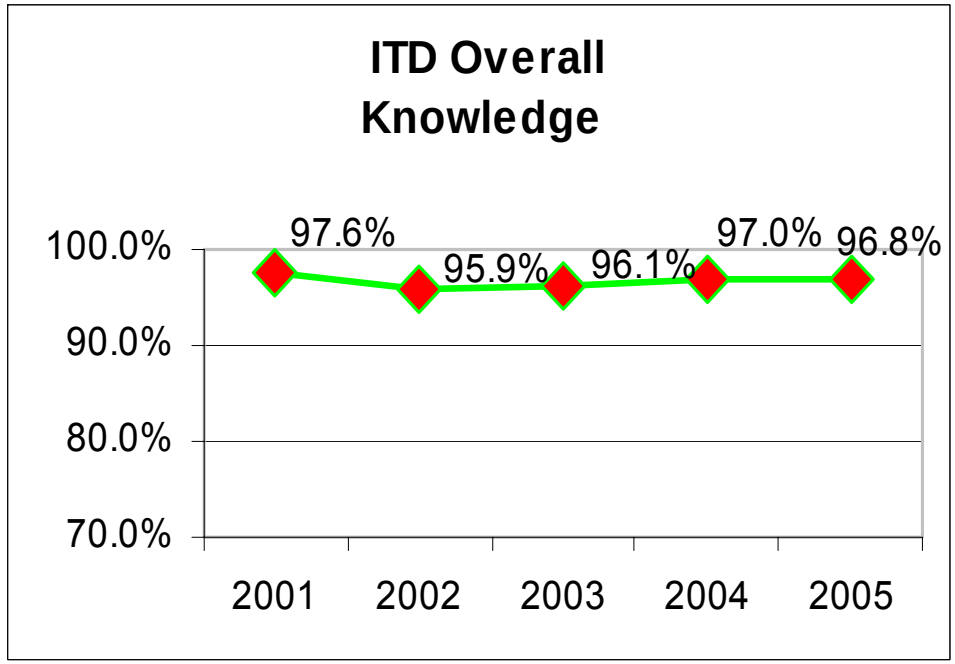
Pam Sharp
Office of Management and Budget

ITD Annual Report

Password: Customer-Centric

Mike Ressler
Information Technology Department


ITD Overall
Professionalism & Courtesy
100.0%
90.0%
80.0%
70.0%
100.0%
98.6%
96.9%
98.0%
96.4%
2001
2002
2003
2004
2005


ITD Overall
Knowledge
100.0%
90.0%
80.0%
70.0%
97.6%
95.9%
96.1%
97.0%
96.8%
2001
2002
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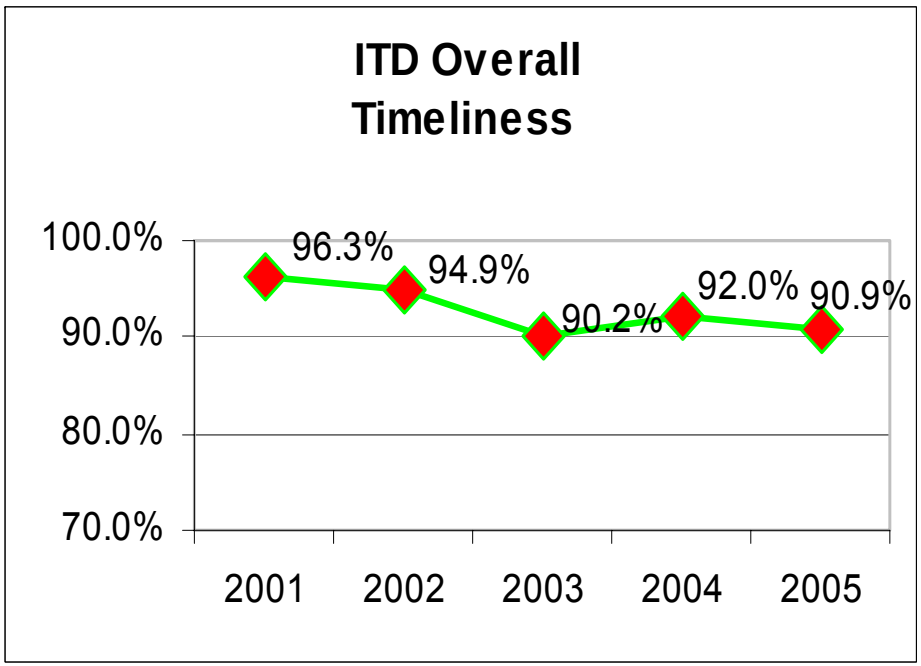
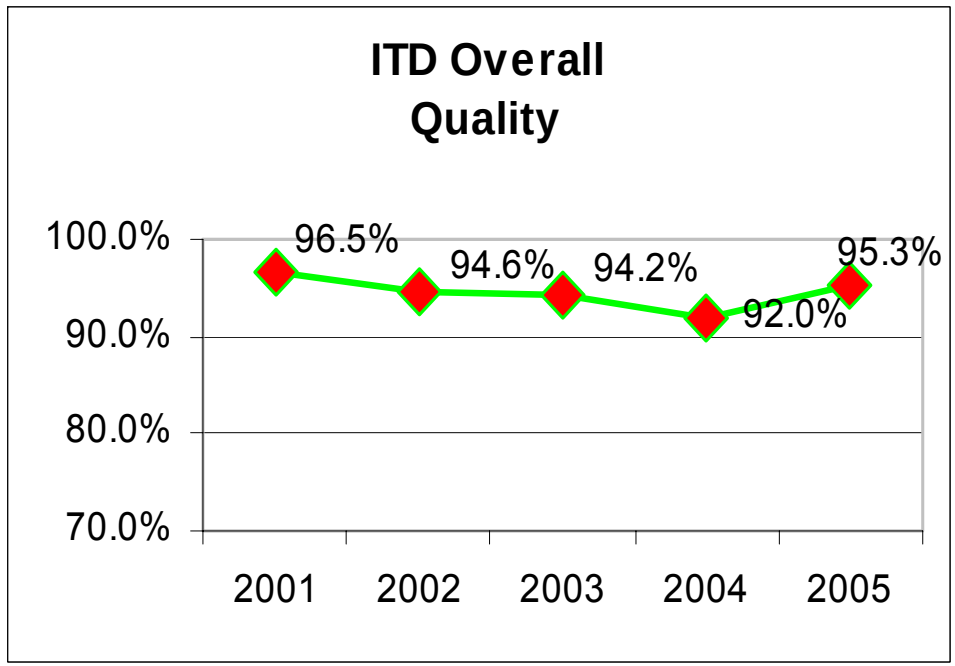
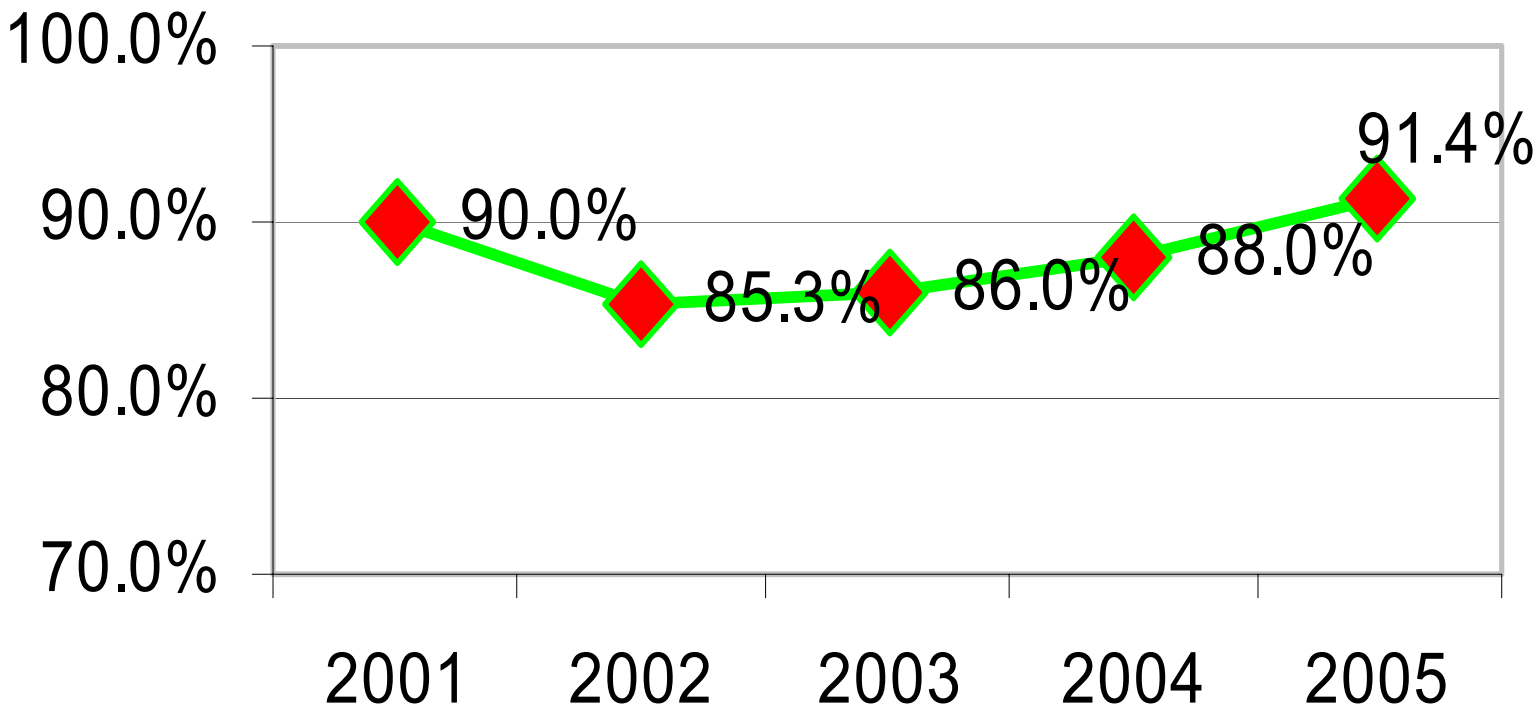
2004
2005

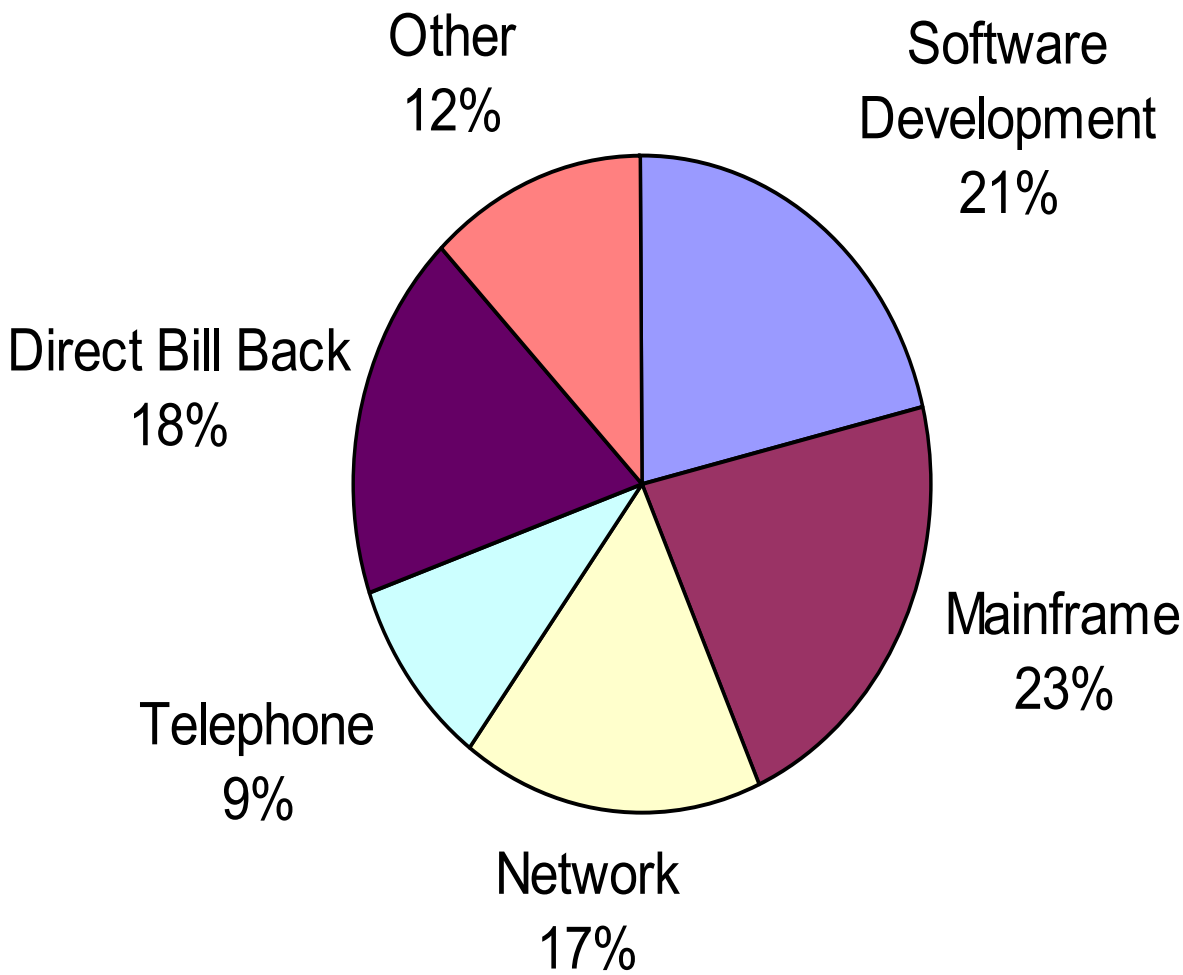

ITD Overall
Timeliness
100.0%
90.0%
80.0%
70.0%
96.3%
94.9%
90.2%
92.0%
90.9%
2001
2002
2003
2004
2005


ITD Overall
Quality
100.0%
90.0%
80.0%
70.0%
96.5%
94.6%
94.2%
92.0%
95.3%
2001
2002
2003
2004
2005

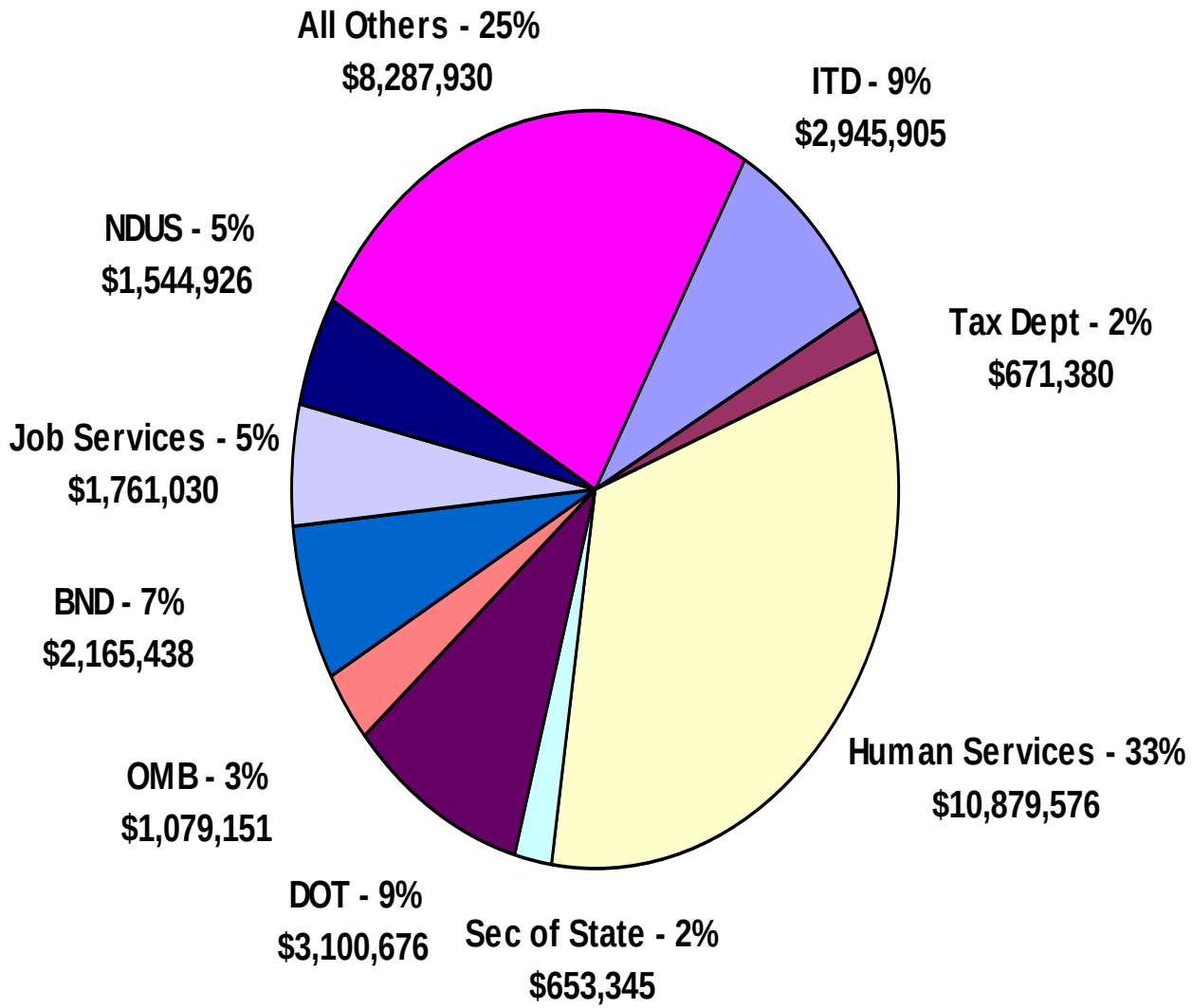
ITD Overall Value



ITD Revenue By Service
Fiscal Year 2005
Total Billing: $33,089,353



ITD Revenue By Department
Fiscal Year 2005
Total Billing: $33,089,353



Information Technology Department
July 2005

Central Computer CPU (Rate is based per second)

	ND ITD	South Dakota	Montana	Wisconsin
Batch CPU	$ .93	$ 1.28	$ 1.90	$ .93
CICS CPU	$ .93	$ 1.28	$ .55	$ 1.23
ADABAS CPU	$ .98	$ 1.28	$ 1.08	$ 1.23
TSO CPU	$ .93	$ 1.28	$ 2.32	$ 1.23

SD operates an IBM zSeries 2066-OC1 mainframe – 39% more speed so their published rate is $ .50 per CPU second

MT operates an IBM zSeries 2066-002 mainframe – same as ITD

WI operates an IBM 2064-1C9 mainframe – 5 times more speed so their published rate is 1/5 the rate above

Network Fees

	ND ITD	South Dakota	Montana	Wisconsin
Device Fee	$ 29.00	$ 48.00	$ 72.60	$ 55.00
DSL Service	Actual ($40-$120)	N/A	$ 250.00	$ 665.00
ATM T-1	$ 840.00	N/A	$ 650.00	$ 1,067.00
Access Fee	N/A	$ 50.00	N/A	N/A

Information Technology Department
July 2005

Telephone Fees

	ND ITD	South Dakota	Montana
Telephone Line	$ 21.00	$ 10.00	$ 26.00
Speaker	$ 2.00	Actual	$ 7.00
Display	$ 3.00	Actual	$ 10.00
Voice Mail (unlimited)	$ 3.00	$ 6.00	
3 minute limit			$ 5.00
6 minute limit			$ 8.00
8 minute limit			$ 10.00

Long Distance (per minute)

	ND	SD	MT	WI	MN	NE	OK
In-State	$ .05	$ .09	$ .105	$ .03	$ .059	$ .07	$ .09
Out-of-State	$ .05	$ .10	$ .105	$ .03	$ .047	$ .07	$ .09
800 Service	$ .07	$ .10	$ .10	$ .047	$ .047	$ .07	$ .11

Information Technology Department
Service Rate Trends

	July '99	July '01	July '03	Jul '05
Software Development				
Systems Analyst	**50.88**	**55.60**	**56.25**	**58.00**
Programmer	**47.20**	**51.40**	**52.00**	**54.00**
Central Computer CPU				
Batch CPU	**1.51**	**1.24**	**1.01**	**.93**
CICS CPU	**1.51**	**1.24**	**1.01**	**.93**
ADABAS CPU	**1.51**	**1.29**	**1.06**	**.98**
TSO CPU	**1.51**	**1.24**	**1.01**	**.93**
(CPU rates for July '99 thru July '03 were adjusted to be comparable to the faster computer purchased in 2004)				
Network Fees				
Device Fee	**20.45**	**29.25**	**29.00**	**29.00**
ATM T-1	**N/A**	**840.00**	**840.00**	**840.00**
Telephone Fees				
Telephone Line	**25.70**	**22.50**	**21.00**	**21.00**
Speaker	**2.10**	**2.00**	**2.00**	**2.00**
Display	**1.05**	**1.00**	**1.00**	**3.00**
Voice Mail (unlimited)	**3.15**	**3.00**	**3.00**	**3.00**
Long Distance				
In-State	**.063**	**.06**	**.06**	**.05**
Out-of-State	**.11**	**.06**	**.06**	**.05**
800 Service	**.105**	**.10**	**.10**	**.07**

EA Activities Report

Jeff Swank
Information Technology Department

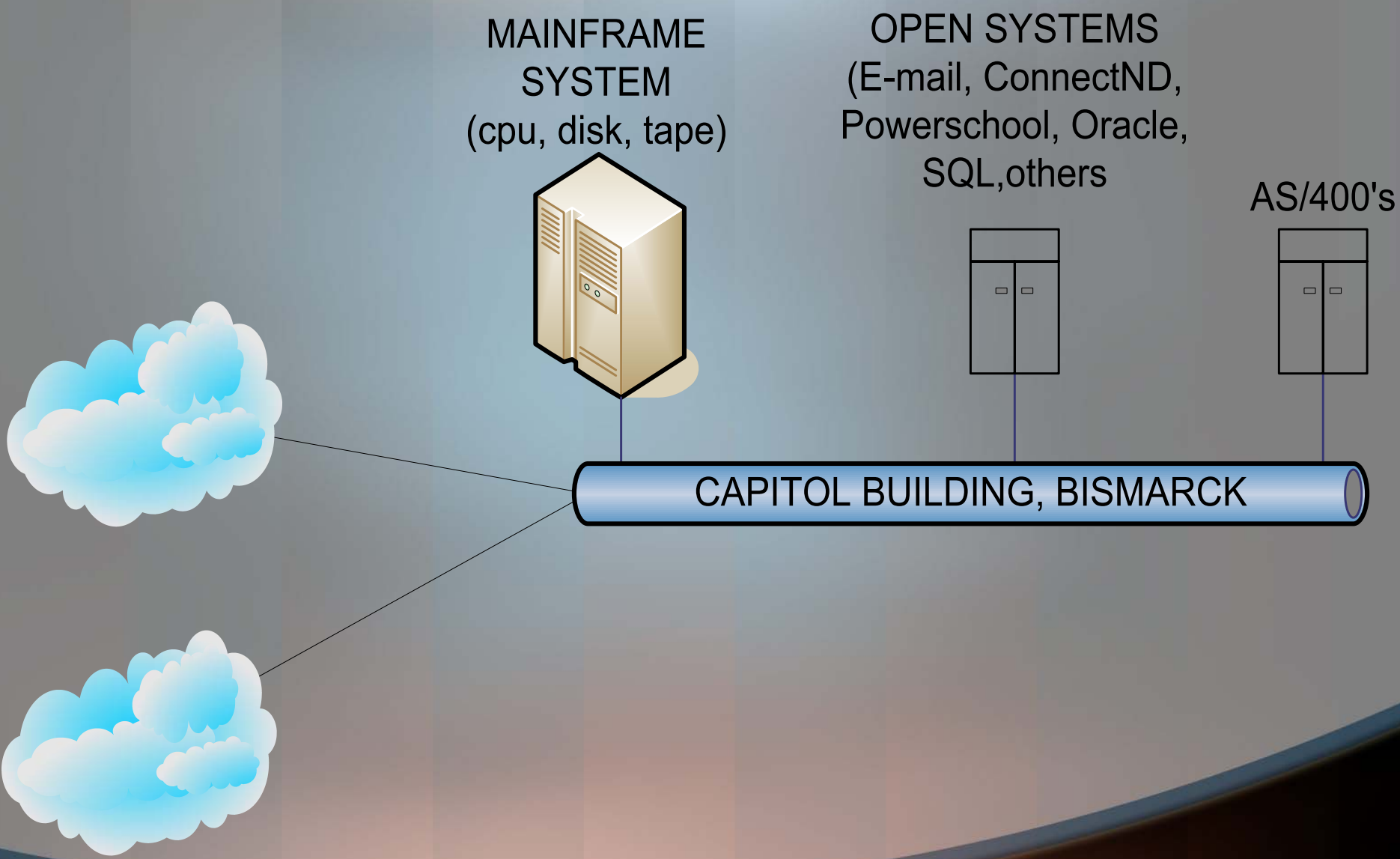
EA Activities Report

- Program update
  - Twila Perhus resigned September 9, 2005
  - Combining EA and IT Planning
    - Jeff Swank will lead
    - Recruiting IT Business Analyst to assist
- EA Activities handout
- Questions

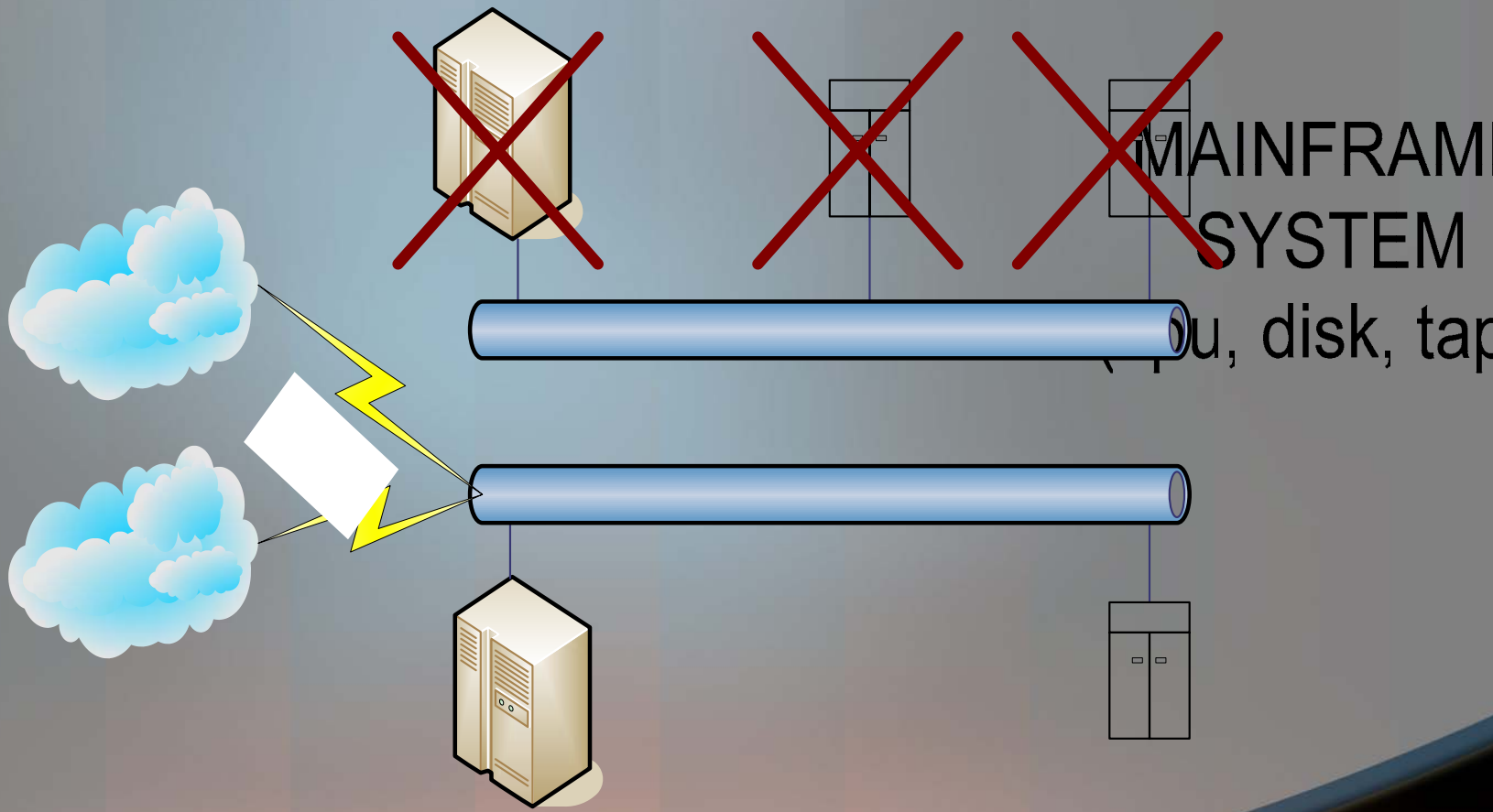
Second Data Center

Dean Glatt
Information Technology Department

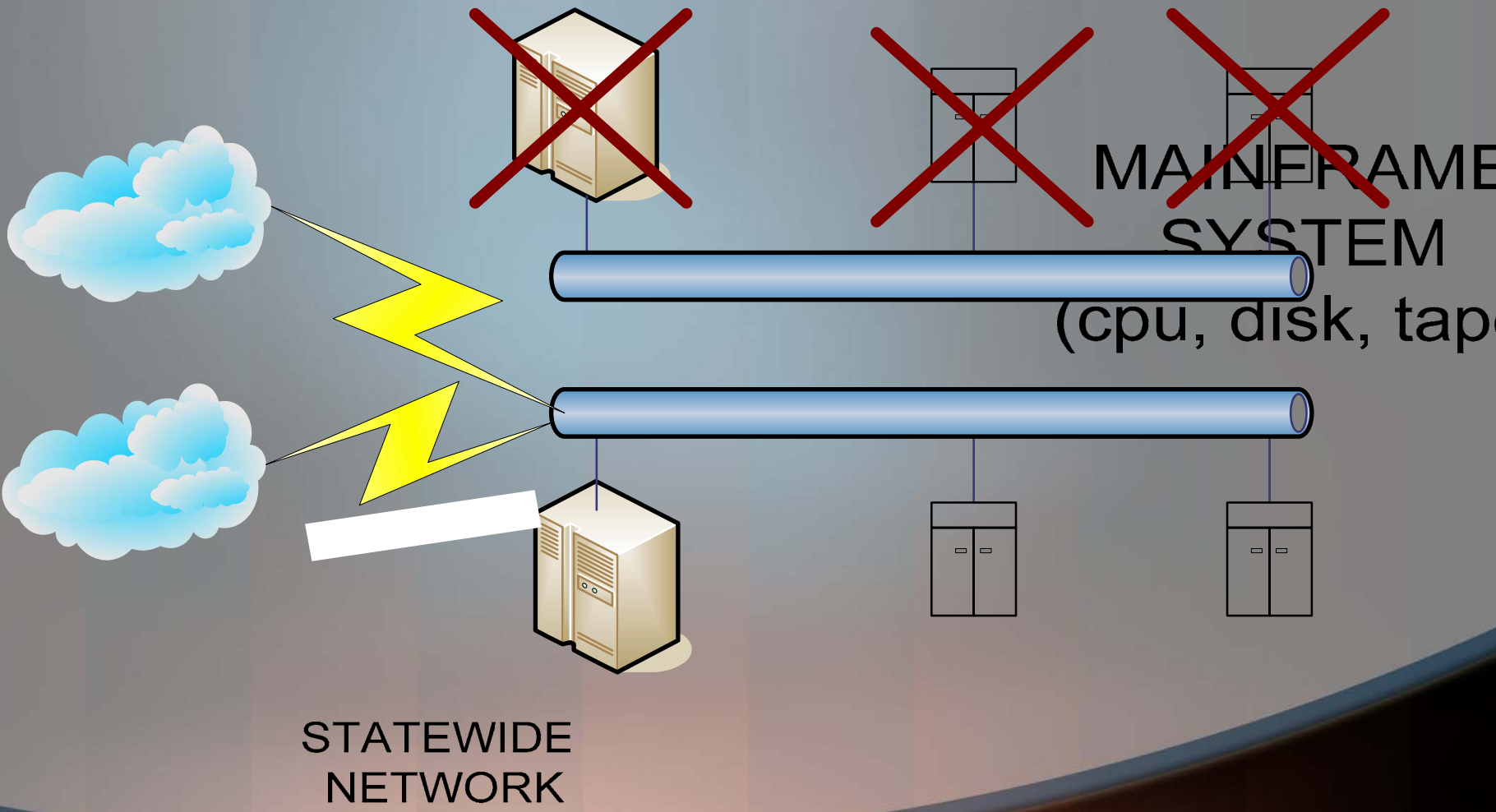
CURRENT ITD CONFIGURATION



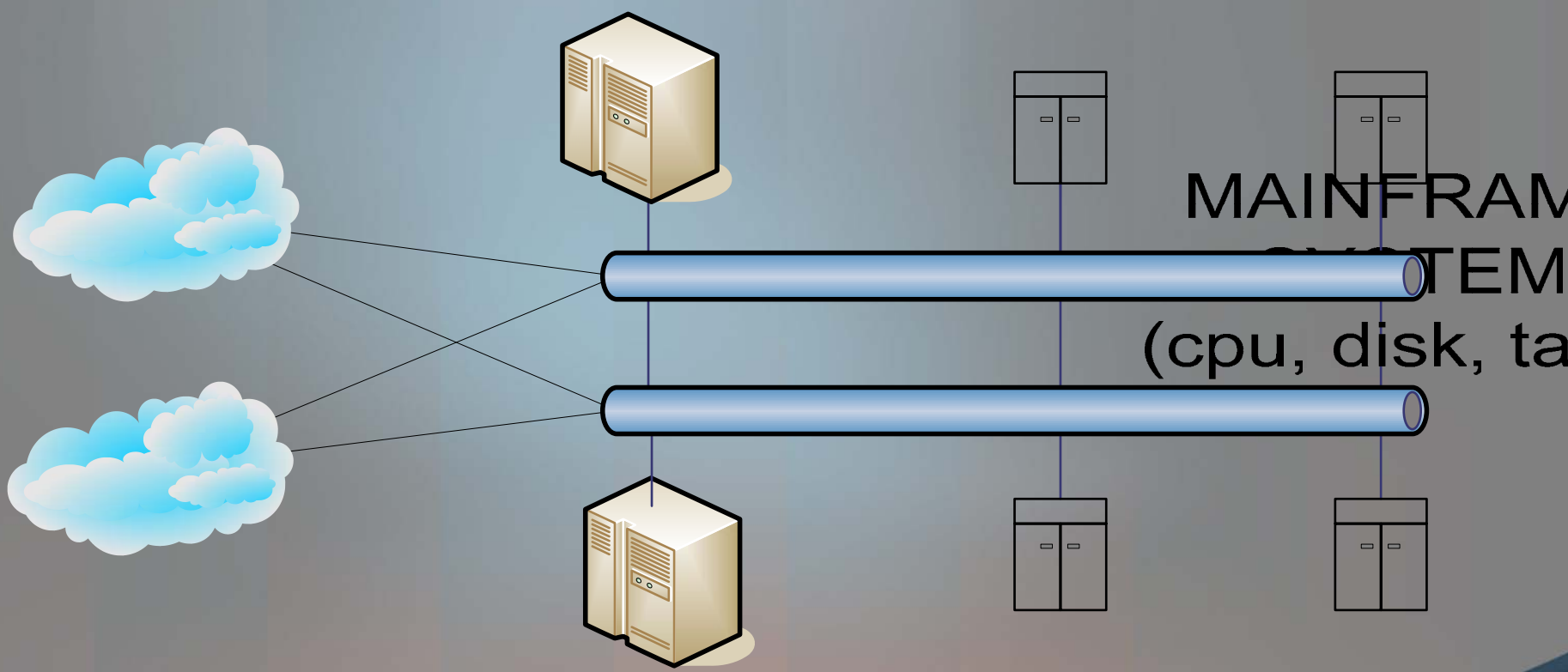
OLD DISASTER RECOVERY HOTSITE METHODOLOGY



NEW DISASTER RECOVERY HOTSITE METHODOLOGY



IN-STATE RECOVERY METHODOLOGY



Questions and/or Discussion?

Thank you!